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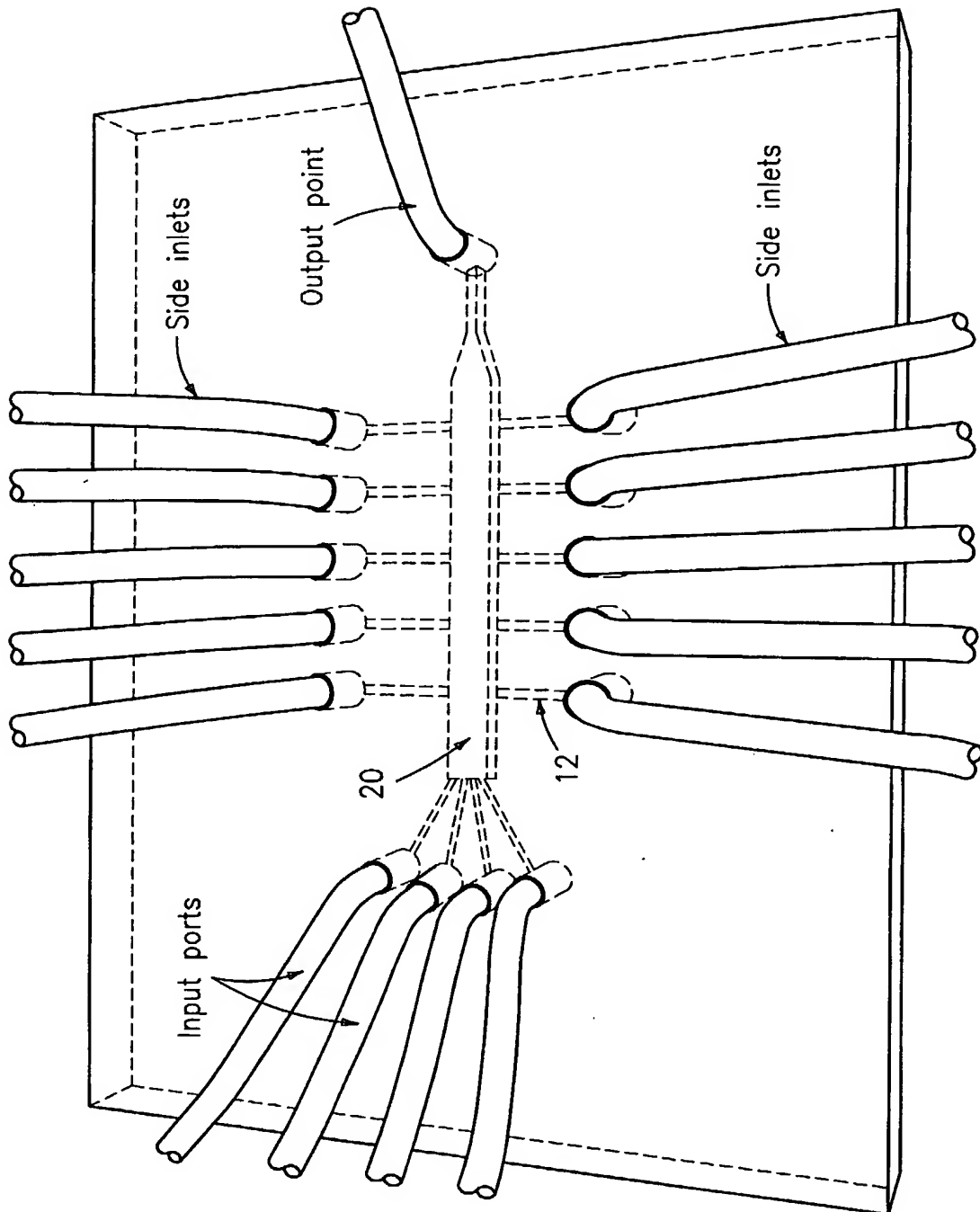


FIG. 1

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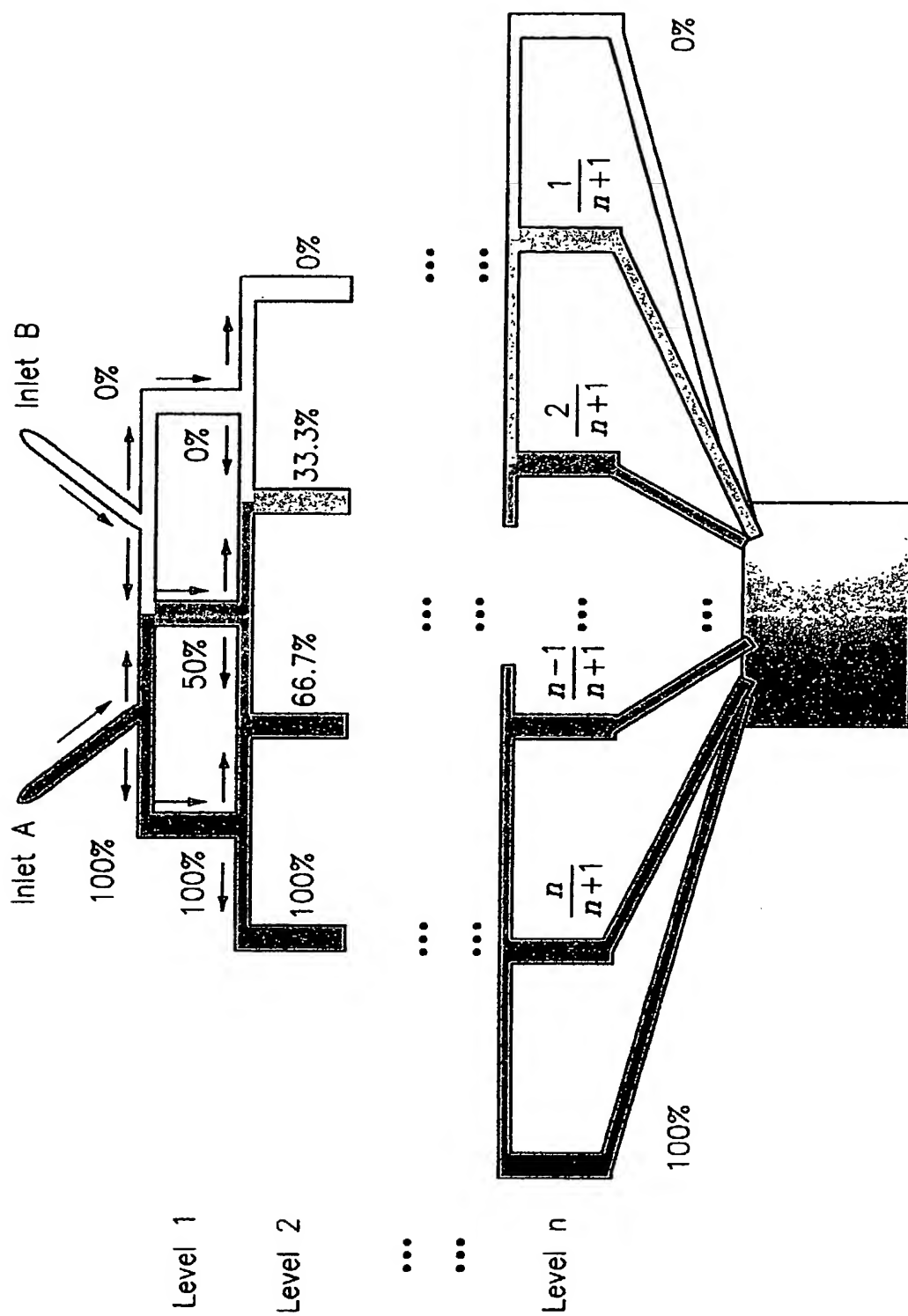


FIG. 2

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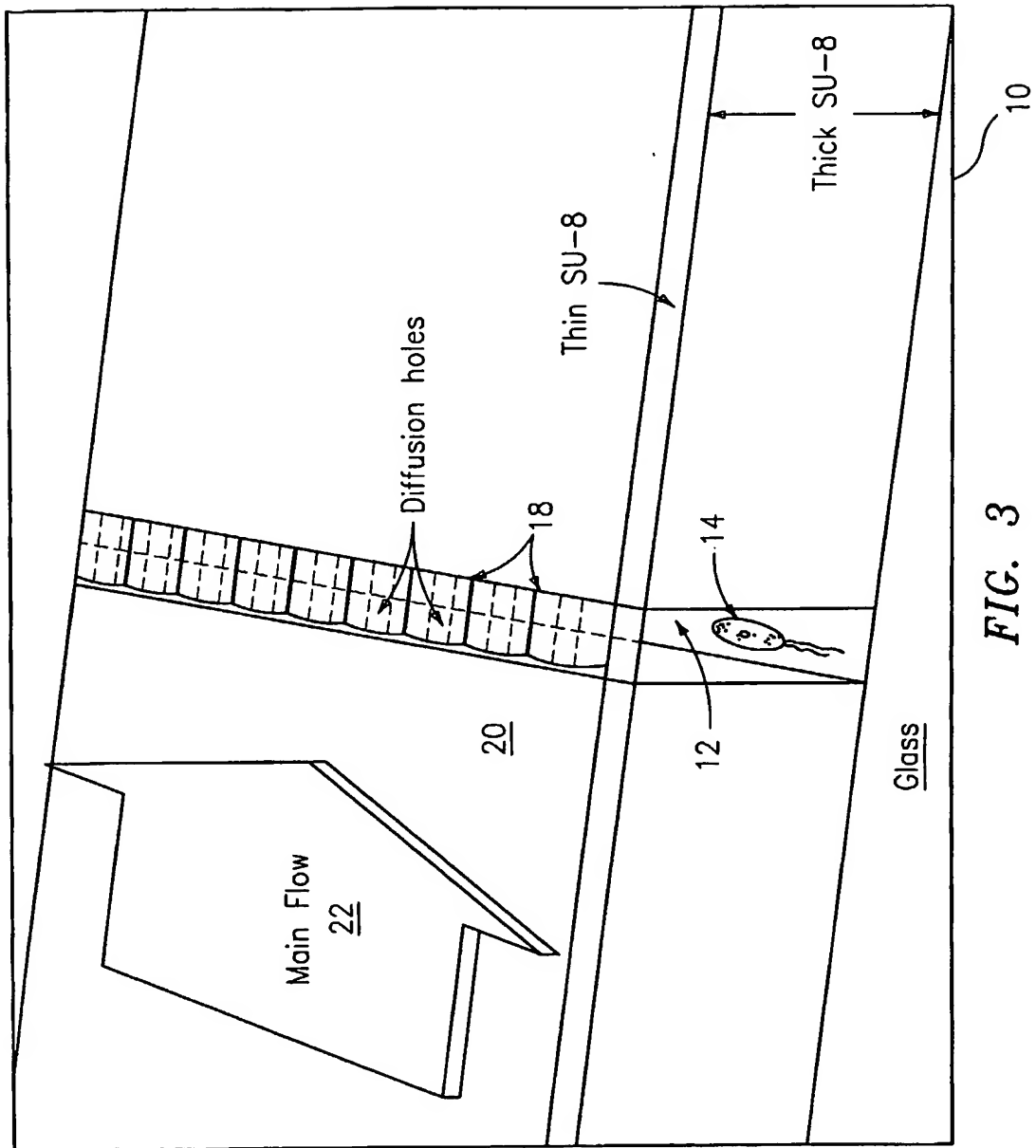
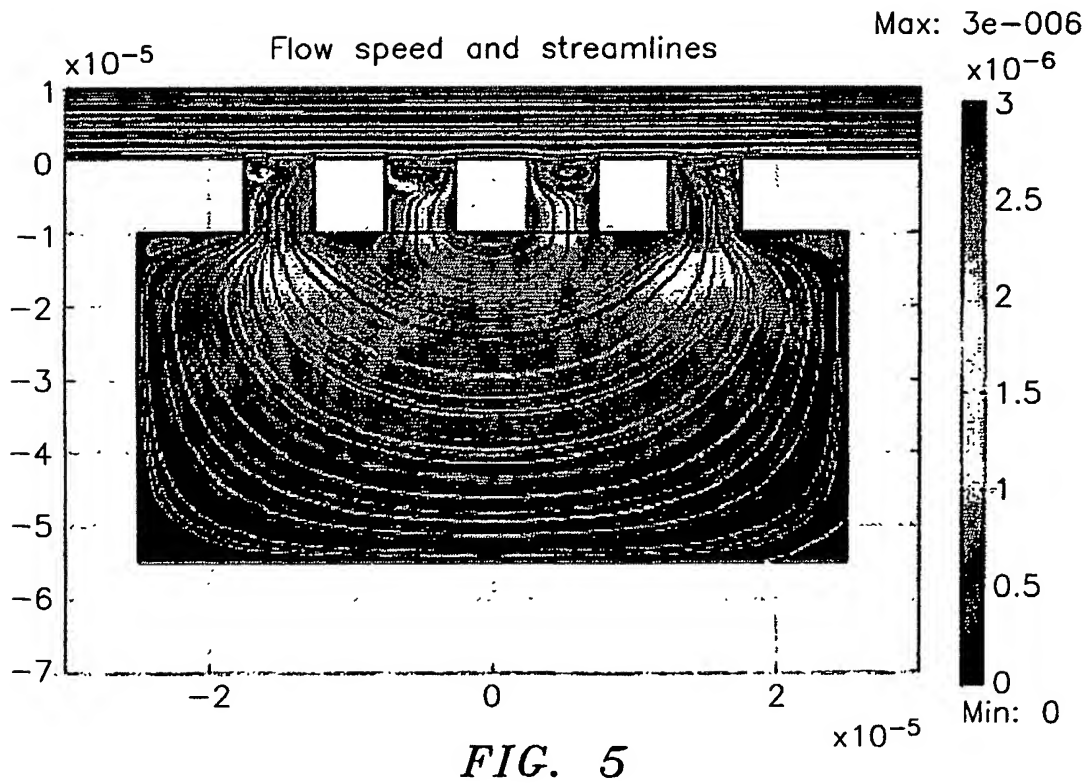
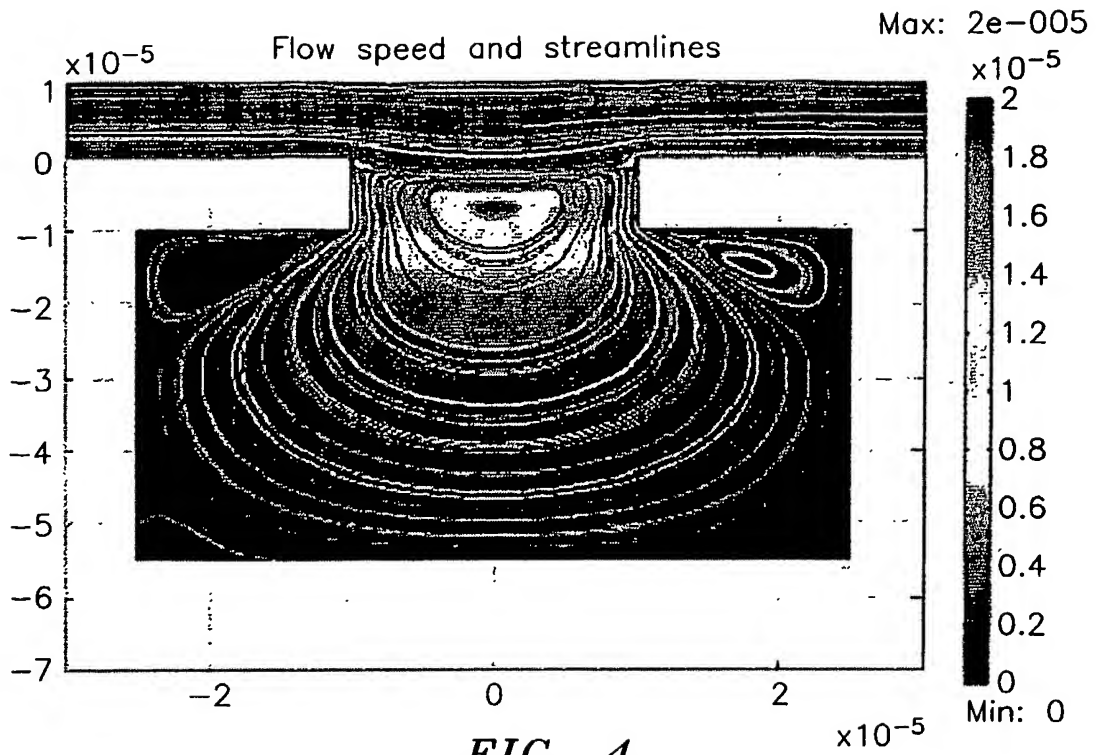


FIG. 3

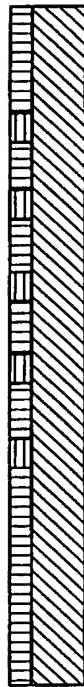
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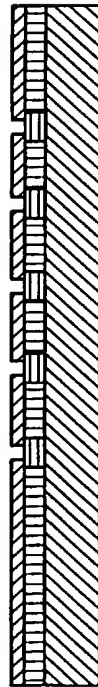
Fabrication of trench geometry



1) Start with a clean glass slide.



2) Spin thick photoresist and expose the confinement channel geometry under a mask aligner. No resist development yet.



3) Deposit a thin layer of silicon nitride or a resist with a very short exposure time.

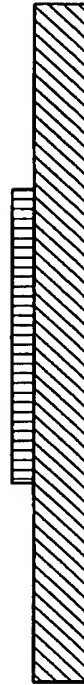


4) Develop the underlying to pattern the trenches.

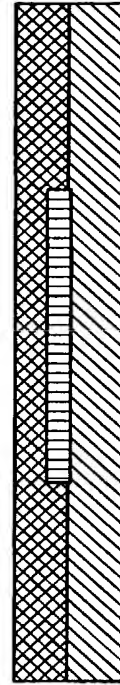
Fabrication of the PDMS channel



1) Start with a clean silicon substrate.



2) Spin thick photoresist and pattern the main flow channel geometry. Treat surfaces with HDMS (to prevent stiction of PDMS).



3) Pour, cure and remove PDMS to micro-mold the main flow channel pattern.

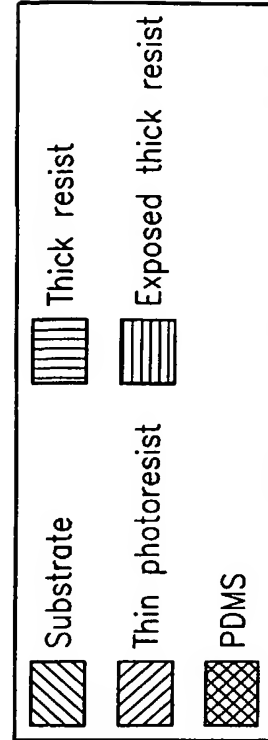


FIG. 6